

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/000192

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G01S13/93 B60R21/01

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G01S B60R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/32030 A (AUTOMOTIVE SYSTEMS LAB) 23 July 1998 (1998-07-23)	1-4, 10-14, 20-24, 30
Y	page 6, line 4 page 6, lines 17,18  page 13, lines 22-26 page 14, line 3 - line 10 page 17, line 23 - page 18, line 8 page 20, line 1 - page 21, line 14; claims 1,22  ----- -/--	5-9, 15-19, 25-29

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

9 June 2004

Date of mailing of the international search report

17/06/2004

Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Johansson, R

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB2004/000192

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 199 63 006 A (BOSCH GMBH ROBERT) 28 June 2001 (2001-06-28)	1-4, 10-14, 20-24,30
Y	column 1, line 48 - line 60  column 2, line 11 - line 18	5-9, 15-19, 25-29
X	US 4 926 171 A (KELLEY WILLIAM L) 15 May 1990 (1990-05-15) column 2, lines 38-61 column 3, lines 8-25 column 4, line 57 - column 6, line 21	1,11,21
X	US 6 087 928 A (KLEINBERG RAYMOND ET AL) 11 July 2000 (2000-07-11) column 4, line 29 - line 54	1,11,21
X	US 3 864 678 A (BITO MINORU ET AL) 4 February 1975 (1975-02-04) the whole document	1,11,21
X	US 5 314 037 A (SHAW JUDY Z-Z ET AL) 24 May 1994 (1994-05-24) column 8, line 24 - column 10, line 13	1,11,21
Y	US 5 633 642 A (HOESS ALFRED ET AL) 27 May 1997 (1997-05-27)  column 6, line 43 - column 7, line 48; claims 9,11	5-9, 15-19, 25-29

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/IB2004/000192

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9832030	A	23-07-1998	US 6085151 A CA 2274716 A1 EP 0954758 A1 JP 2002511922 T WO 9832030 A1	04-07-2000 23-07-1998 10-11-1999 16-04-2002 23-07-1998
DE 19963006	A	28-06-2001	DE 19963006 A1 WO 0148512 A1 EP 1157287 A1 JP 2003518635 T US 2003036850 A1	28-06-2001 05-07-2001 28-11-2001 10-06-2003 20-02-2003
US 4926171	A	15-05-1990	NONE	
US 6087928	A	11-07-2000	NONE	
US 3864678	A	04-02-1975	JP 902086 C JP 48100821 A JP 52027888 B AU 458491 B2 AU 5422073 A CA 997044 A1 DE 2317465 A1	30-03-1978 19-12-1973 22-07-1977 27-02-1975 10-10-1974 14-09-1976 11-10-1973
US 5314037	A	24-05-1994	US 5529138 A	25-06-1996
US 5633642	A	27-05-1997	WO 9514939 A1 EP 0730742 A1 JP 9506698 T	01-06-1995 11-09-1996 30-06-1997